Name \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Period \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Date\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Arithmetic Sequences and Finding the nth Term Given the Common Difference and a Term

Identify which of the following sequences is arithmetic. If the sequence is arithmetic find the nth term rule.

1) 2, 3, 4, 5,…

2) 6, 2, −1, −3,…

3) 5, 0, −5, −10,…

4) 1, 2, 4, 8,…

5) 0, 3, 6, 9,…

6) 13, 12, 11, 10,…

7) 4, −3, 2, −1,…

8) a, a+2, a+4, a+6,…

Write the nth term rule for each arithmetic sequence with the given term and common difference.

9) $a\_{1}=15 and d=8$

10) $a\_{1=-10 }and d=$

11) $a\_{3}=24 and d=-2$

12) $a\_{5}-3 and d=3$

13) $a\_{10}=-15 and d=-11$

14) $a\_{7}=32 and d=7$